

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 3742098 B1 20210505 (EN)

Application
EP 19175405 A 20190520

Priority
EP 19175405 A 20190520

Abstract (en)
[origin: EP3742098A1] A heat exchanger, in particular a radiator for a cooling system of a motor-vehicle engine, comprises a plurality of tubes (8). The plurality of all the tubes (8) is defined by a single body in one piece, made by additive manufacturing technology. The tubes (8) each extend along a tortuous path, so as to increase the surface for heat exchange, without requiring the provision of auxiliary fins within the spaces between the tubes. The above-mentioned tubes (8) may have a sinusoidal configuration and may be aligned in rows and columns, according to a matrix arrangement, or they can define a three-dimensional net arrangement, with the tubes which communicate, or do not communicate, with each other, or they can define a tangled chaotic arrangement, with the tubes being in communication, or not in communication, with each other. The body of the heat exchanger may have a non-conventional configuration, such as an elongated and curved shape, so that it can be adapted to the shape of the front wall of a motor-vehicle, adjacent to which the heat exchanger is to be mounted.

IPC 8 full level
F28D 7/00 (2006.01); **B29C 64/00** (2017.01); **F28F 7/02** (2006.01)

CPC (source: EP)
F28D 7/005 (2013.01); **F28F 7/02** (2013.01); **B33Y 80/00** (2014.12); **F28F 2255/18** (2013.01)

Cited by
CN113720193A; GB2607136A; EP4015956A1; US2022205735A1; US11555659B2; WO2022147595A1; DE102022005012A1; DE102022111588A1

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